

Listing of Claims

- 1-37. (Cancelled)
38. (Previously Presented) A patient support comprising:
a bedframe,
a plurality of casters to support the bedframe on a floor,
a wheel,
a wheel lifter configured to move the wheel between a first position spaced apart from the floor and a second position in contact with the floor,
a motor operably connected to the wheel and configured to drive the wheel,
at least one load cell operably coupled to the motor, the at least one load cell being operable to receive a force from a user and provide a force signal based on the force, and
a controller to drive the motor in response to the force signal.
39. (Previously Presented) A patient support comprising:
a bedframe,
a plurality of casters to support the bedframe on a floor,
a wheel to move the patient support,
a motor operably connected to the wheel to drive the wheel,
at least one load cell operably coupled to the motor, the at least one load cell configured to receive a force from a user and provide a force signal based on the force, and
a controller to drive the motor in response to the force signal.
40. (Previously Presented) The patient support of claim 38, further comprising at least one handle operably coupled to the at least one load cell, the at least one handle being configured to receive the force from the user.
41. (Previously Presented) The patient support of claim 38, further including a first handle and a second handle spaced from the first handle, wherein at least one of the first handle and the second handle is configured to receive the force from the user.
42. (Previously Presented) The patient support of claim 41, wherein the first handle and the second handle are supported for selective pivotal movement such that the first handle and the second handle are configured to fold toward each other.
43. (Previously Presented) The patient support of claim 38, further comprising a button operable to receive an enable command from the user and provide to the controller an enable signal in response to the enable command.

44. (Previously Presented) The patient support of claim 38, wherein the at least one load cell includes a resistor.

45. (Previously Presented) The patient support of claim 38, wherein the at least one load cell is coupled to the bedframe.

46. (Previously Presented) The patient support of claim 39, further including a first handle and a second handle spaced from the first handle, wherein at least one of the first handle and the second handle are configured to receive the force from the user.

47. (Currently Amended) The patient support of claim [44] 46, wherein the first handle and the second handle are supported for selective pivotal movement such that the first handle and the second handle are configured to fold toward each other.

48. (Previously Presented) The patient support of claim 39, further comprising a button operable to receive an enable command from the user and provide to the controller an enable signal in response to the enable command.

49. (Previously Presented) The patient support of claim 39, wherein the at least one load cell includes a resistor.

50. (Previously Presented) The patient support of claim 39, wherein the at least one load cell is coupled to the bedframe.

51-53 (Cancelled)

54. (Previously Presented) A patient support comprising:
a bedframe,
a plurality of casters to support the bedframe on a floor,
a wheel configured to move the patient support,
a motor to drive the wheel,
a first handle operable to receive a first force input from a user and provide a first signal based on the first force input;
a second handle operable to receive a second force input from a user and provide a second signal based on the second force input; and
a controller coupled to the first handle to receive the first signal therefrom and coupled to the second handle to receive the second signal therefrom, the controller being operable to provide a control signal to the motor based on at least one of the first signal and the second signal.

55. (Previously Presented) The patient support of claim 54, wherein at least one of the first handle and the second handle is operably coupled to at least one load cell.

56. (Previously Presented) The patient support of claim 55, wherein the first handle is spaced apart from the second handle.

57. (Currently Amended) The patient support of claim ~~54~~ 54, wherein the first handle and second handle are supported for selective pivotal movement such that the first handle and the second handle are configured to fold toward each other.

58. (Previously Presented) The patient support of claim 54, further comprising a button operable to receive an enable command from the user and provide an enable signal in response to the enable command, the motor being configured not to drive the wheel in the absence of the enable signal.

59. (Previously Presented) The patient support of claim 54, further comprising:
at least one battery for storing energy for use by the motor;
a detector in communication with the at least one battery for detecting the amount of energy stored in the at least one battery and providing a signal indicative thereof; and
a relay coupled intermediate the at least one battery and the motor to receive the signal, wherein the relay disconnects the at least one battery from the motor when the signal indicates that the energy stored within the at least one battery is less than a predetermined amount.

60. (Previously Presented) The patient support of claim 54, further comprising a wheel lifter to move the wheel between a first position spaced apart from a floor and a second position in contact with the floor.

61. (Previously Presented) The patient support of claim 60, wherein the wheel lifter pivots the wheel about a pivot axis between the first and second positions.

62. (Previously Presented) The patient support of claim 60, wherein the wheel lifter includes a wheel mount, an actuator, and a link operably coupled to the wheel mount and the actuator, the wheel being supported by the wheel mount, the actuator being configured to move the link substantially horizontally such that the wheel mount and the wheel move between the first and second positions.

63. (Previously Presented) The patient support of claim 60, further comprising:
a power detector, the external power detector being operable to determine if external power is supplied to the control system and provide a power indication signal in response thereto;

a caster detector, the caster detector being operable to detect a mode of operation of the casters and provide a caster indication signal in response thereto; and

a controller coupled to the external power detector to receive the power indication signal therefrom and coupled to the caster detector to receive the caster indication signal therefrom, the controller being operable to provide a control signal to the wheel lifter in response to the power indication signal and the caster indication signal.

64. (Previously Presented) The patient support of claim 54, further comprising at least one battery configured to provide power to the motor, and a braking system coupled to the at least one battery and configured to detect the power available to drive the motor and to provide braking based upon the power detected.

65. (Previously Presented) The patient support of claim 64, further comprising an override switch configured to disengage the braking system.

66. (Previously Presented) A patient support comprising:
a bedframe,
a plurality of casters to support the bedframe on a floor,
a wheel configured to move the patient support,
a motor to drive the wheel,
at least one handle operable to receive a user force input,
at least one load cell coupled to the at least one handle to receive the user force input therefrom, the at least one load cell operable to provide a signal based on the user force input, and

a controller coupled to the at least one load cell to receive the signal therefrom, the controller being operable to provide a control signal based on the signal to command the motor to operate at an output based on the control signal.

67. (Currently Amended) The patient support of claim 66, further comprising at least one battery configured to provide power to the motor.

68. (Previously Presented) The patient support of claim 66, wherein the at least one handle is further operable to (i) receive a first user force corresponding to a first desired speed of the motor, (ii) receive a first feedback force corresponding to a first actual speed of the motor, and (iii) generate the user force input based on a difference between the first user force and the first feedback force.

69. (Previously Presented) The patient support of claim 66 includes a first handle and a second handle positioned in spaced relation to the first handle.

70. (Previously Presented) The patient support of claim 69, wherein the first handle and the second handle are supported for selective pivotal movement such that the first handle and the second handle are configured to fold toward each other.

71. (Previously Presented) A patient support comprising:
a bedframe,
a plurality of casters to support the bedframe on a floor,
at least one elastic force sensing element operable to receive a force from a user and provide a signal based on the force;

a motor operably coupled to the at least one elastic force sensing element, the motor having a shaft, the motor being operable to rotate the shaft in response to the signal; and
a wheel to receive power from the shaft to propel the bedframe.

72. (Previously Presented) The patient support of claim 71 comprising a first handle and a second handle spaced from the first handle, wherein at least one of the first handle and the second handle are configured to receive the force from the user and transmit the force to the at least one elastic force sensing element.

73. (Previously Presented) The patient support of claim 72, wherein the at least one elastic force sensing element provides the signal in a first state when the force from the user is applied in a first direction relative to the support frame and the at least one elastic force sensing element provides the signal in a second state when the force from the user is applied in a second direction relative to the support frame.

74. (Previously Presented) The patient support of claim 73, wherein the signal in the first state causes the motor to rotate the shaft in a first shaft direction at a first speed and the signal in the second state causes the motor to rotate the shaft in a second shaft direction at a second speed.

75. (Previously Presented) The patient support of claim 74, wherein the first speed is faster than the second speed.

76. (Previously Presented) The patient support of claim 74, wherein the first state causes the support frame to move in a forward direction and the second state causes the support frame to move in a reverse direction.

77. (Previously Presented) The patient support of claim 71, further comprising a button operable to receive an enable command from a user and provide an enable signal in response to the enable command, the motor being configured not to rotate the shaft in the absence of the enable signal.

78. (Previously Presented) The patient support of claim 71, wherein the at least one force sensing element includes a load cell.

79. (Cancelled)